**IN THE SPECIFICATION**

**[0037]** In the hybrid scheme, each base station and each GPS satellite represents a transmission node. To determine the position of the remote terminal, transmissions from three or more non-spatially aligned nodes (base stations and/or satellites) are processed. A fourth node may be used to provide altitude and may also provide increased accuracy (i.e., reduced uncertainty in the measured arrival times). The signal arrival times can be determined for the transmission nodes and used to compute pseudo-ranges, which can then be used (e.g., via a trilateration technique) to determine the position of the remote terminal. Position determination can be achieved in accordance with the techniques described in the aforementioned 3GPP 25.305, TIA/EIA/IS-801, and TIA/EIA/IS-817 standard documents and in ~~U.S Patent Application Serial No. 09/430,618~~ U.S. Patent No. 6,353,412.

**[0066]** FIG. 5 shows a specific example of the cataloging of the environment type to determine the transmission source of a time measurement. Other examples can be provided for other environments, for example, downtown, rural areas, shopping malls, indoors, and so on. For example, referring back to FIG. 1, a remote terminal under the coverage of either repeater ~~112b or 112c~~ 114b or 114c may not receive signals from as many other base stations as a remote terminal located under the coverage of base station 104a, 104b, or 104c.

**[0071]** For FIG. 6A, the worst case propagation delays for the transmission from base station 104 to remote terminal 106 can be determined as the delays [[$T_{BR2}$]] $T_{BT2}$ associated with reflected path 610b. And for FIG. 6B, the best-case propagation delays $T_{BRT}$ for the transmission from base station 104 to remote terminal 106 is dependent on the delays $T_{BR}$ from the base station to the repeater, the delays $T_R$ introduced by the repeater, and the delays $T_{RT}$ from the repeater to the remote terminal (i.e., $T_{BRT} = T_{BR} + T_R + T_{RT}$). If there is a time difference (i.e., a gap) between the worst case propagation delays [[$T_{BR2}$]] $T_{BT2}$ for a transmission from the base station and the best case propagation delays $T_{BRT}$ for a transmission from the repeater, then a threshold value can be selected to determine whether the remote terminal is under the coverage of the base station or the repeater. The threshold value can be selected based on the following:

$$T_{Base\_station} < T_{TH} < T_{Repeater}, \qquad \text{Eq (1)}$$

where $T_{Base\_station}$ is the worst case propagation delays for a transmission received from the base station ($T_{BT2}$), $T_{TH}$ is the threshold value, and $T_{Repeater}$ is the best-case propagation delays for a transmission received from the repeater ($T_{BRT}$).

[0089] Back at step 922, if the time measurements are from repeated base stations and a non-repeated base station cannot be selected as the reference base station, the time measurements from the repeated base stations are retained, at step 928. The PDE then appropriately generates search windows to account for the additional ambiguity due to the repeaters, at step 930.

[00102] Determination of the position of a remote terminal based on a number of time measurements for a number of transmissions from the same originating base station can be achieved, for example, in a manner described in ~~U.S. Patent Application Serial No. (Attorney Docket No. PA990504)~~ U.S. Patent No. 6,289, 280, issued on September 11, 2001 entitled "METHOD AND APPARATUS FOR DETERMINING AN ALGEBRAIC SOLUTION TO GPS TERRESTRIAL HYBRID LOCATION SYSTEM EQUATIONS," ~~filed xxx~~, assigned to the assignee of the present application and incorporated herein by reference. A root mean square error (RMSE) metric can be computed in a manner known in the art for each position fix based on the signal strength associated with each time of arrival (TOA) estimate. Weaker signal strength for a received multipath corresponds to a higher likelihood that the signal has been bounced around. A transmission with weaker signal strength generally corresponds to greater ambiguity in a position fix computed based on this transmission and a correspondingly lower metric. Thus, the position fixes are usually associated with "residuals", which are representative of the uncertainty for the estimated position fixes. The computation of the metric is described in further detail in the aforementioned ~~U.S. Patent Application Serial No. (Attorney Docket No. PA990504)~~ U.S. Patent No. 6,289, 280.

[00118] The position fix with the best metric is then selected as the estimated position of the remote terminal, at step 1522. For the selected position fix, a determination is then made whether the remote terminal is under the coverage of a repeater, at step 1524. If the answer is no, the search windows for the remote terminal are generated in the normal manner (i.e., without compensating for repeaters), at step 1518. Otherwise, if the remote terminal is estimated to be under the coverage of a repeater, the search windows are generated in a manner to account for the additional ambiguity associated with the repeater, ~~at step 1524~~ at step 1526. This may entail widening and/or shifting the search windows depending on the delays, as described above. The process then terminates.